Isolation and Characterization of Pathogenic Bacteria Isolated from Mobile Phone of Medical Staff in Hilla Surgical Hospital

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Abstract:

Nosocomial infections continue to pose risks of increased mortality and morbidity in patients. The hands of healthcare workers (HCWs) play an important role in transmission of this infection. Over the past decade, mobile phones (MPs) have become an essential accessory in our social and professional life. The mobile phones of HCWs harbour many harmful pathogens which serve as a reservoir for nosocomial infections(Brady et al,2007). This study aimed to show the pathogenic bactertial profile present on the mobile phone of medical staff working in Hilla Surgical Hospital. During the period April to Augest/2009 ,a total of 100 swab samples were collected from the mobile phone of medical staff ,as well as 50 swab samples were collected from mobile phone of non medical staff individuals not working in hospitals as controls. These swabs were subjected to the conditions of aerobic bacterial cultivation .The results showed that 68%of mobile phone of medical staff were carrying pathogenic bacteria ,which is characterized by hemolysin production. The main isolates were diagnosed as *Staphylococcus aureus* including methicillin resistant *Staphylococcus aureus*(MRSA) ,which was isolated from three samples. The isolates of mobile phone of medical staff: total samples 100- Staph aureus 19 ,three of them were mrsa detected by methicillin disk, Staph epidermidis 24,Enterococcus sp 6, Staph epidermidis24, Enterococcus sp 6, Staph epidermidis 24Enterococcus sp 6,Micrococcus sp. 2,Bacillus sp. 4,E.coli 9,Proteus sp. 2,and Moraxella1. The samples of control gave 20% of positive culture and the main isolate was *Staphylococcus aureus*. The isolates of mobile phone of controls: total samples 50 -Staph aureus 4 ,Staph epidermidis 3,E.coli 2,Enterococcus sp 1.Thus one could conclude

that mobile phone is considered as one route for the transferring the pathogenic bacteria from the hospital to the external environment ,vice versa, and from hospital environment to the patients.

Reference:

1-Brady RR, Fraser SF, Dunlop MG, Paterson - Brown S, Gibb AP. Bacterial contamination of mobile communication devices in the operative environment. J Hosp Infect 2007;66 : 397-8.

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